

ABSTRACT OF THE DISCLOSURE**FLEXIBLE ARCHITECTURE FOR RAIL MOUNTED MULTIPLE ROBOTS IN
A STORAGE LIBRARY**

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A storage library with a stand-alone guide rail system is provided. The library comprises at least one array of storage cells and a guide rail running along the storage cells. A picker robot is coupled to the guide rail, wherein the robot moves along the guide rail and can manipulate objects within the storage cells. The library also comprises a central power source and controller that controls the movement of the robot. The robot receives power and control only from the central power source and controller directly through the guide rail, without any external input from other components in the library. In one embodiment, multiple library enclosures are connected with guide rails, wherein the guide rails form a single, integrated power and communication connection between the robot and the central power source and controller, independent and exclusive of the separate enclosures.

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